

#### STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

#### DEPARTMENT ORDER

ReEnergy Stratton LLC Franklin County Stratton, Maine A-368-70-O-A Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #1

## **FINDINGS OF FACT**

After review of the Part 70 License amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

## I. REGISTRATION

## A. Introduction

FACILITY	ReEnergy Stratton LLC
LICENSE TYPE	Part 70 Minor License Modification
NAICS CODES	221119
NATURE OF BUSINESS	Biomass Electrical Generation Facility
FACILITY LOCATION	27 Fox Farm Rd, Stratton, Maine

ReEnergy Stratton LLC (RES) is a biomass-fired electrical generation facility capable of generating up to approximately 50 megawatts (gross) of electricity. The plant consists of one steam generating unit (Boiler #1) which fires primarily sawmill residues, whole tree chips, and other wood fuels. Fuel oil is used during startups, shutdowns, flame stabilization, and emergency situations only. Boiler #1 supplies steam to a steam turbine for the generation of electricity.

In 2023, the Department completed rulemaking on revisions to *Visible Emissions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 101. The revised rule went into effect on January 1, 2024. RES has requested an amendment to their Part 70 License to address new and revised applicable requirements due to this rulemaking.

## **B.** Emission Equipment

The following emission units are impacted by this Part 70 License amendment:

#### Boiler

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Equipment	Max. Heat Input Capacity (MMBtu/hr)		Maximum Firing Rate	Dates of	Stack #
Boiler #1	672.0	Biomass	74.7 ton/hr	Manufacture: 1988	01
	140.0	Distillate fuel	1,000 gal/hr	Installation: 1989	01

## Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Output	Fuel Type, % sulfur	Mfr. Date	Install. Date	Stack #
Diesel Unit 1 (Generator)	3.33	23.8	341.3kW (475 hp)	Distillate fuel,	2/1992	1993	002
Diesel Unit 2 (Fire Pump)	1.37	9.8	196 hp (140 kW)	0.0015% by weight	6/1988	1989	003
Propane Unit 1 (Generator)	0.78	8.5	80 kW (112 hp)	Propane	1988	1969	004

## C. Definitions

<u>Biomass</u> means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue and wood products (*e.g.*, trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings). This definition also includes wood chips and processed pellets made from wood or other forest residues. Inclusion in this definition does not constitute a determination that the material is not considered a solid waste. RES should consult with the Department before adding any new biomass type to its fuel mix.

*Distillate Fuel* means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- · Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

<u>Records</u> or <u>Logs</u> mean either hardcopy or electronic records.

## **D.** Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

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A Part 70 Minor License Modification is for a license change that meets the following criteria:

- Does not violate any Applicable requirement;
- Does not involve a significant change to existing monitoring, reporting, or recordkeeping requirements in the license;
- Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impact or a visibility or increment analysis;
- Does not seek to establish or change a Part 70 license term or condition for which there
  is no corresponding underlying Applicable requirement, and that the source has
  assumed to avoid an Applicable requirement to which the source would otherwise be
  subject. Such terms and conditions include a federally enforceable emissions cap
  assumed to avoid classification as a Title I modification or a modification or
  reconstruction under any provision of Section 111, or 112 of the Clean Air Act (CAA);
  and an alternative emissions limit approved pursuant to regulations promulgated under
  section 112(i)(5) of the CAA;
- Is not a Title I modification or a modification or reconstruction under any provision of Section 111 or 112 of the CAA; and
- Is not required by the Department to be processed under Part 70 Significant License Modification procedures.

RES has requested the incorporation into the Part 70 License the relevant new and revised applicable requirements of 06-096 C.M.R. ch. 101. The incorporation of these existing standards is not considered a Part 70 Significant License Modification or a Title I modification. The facility is not proposing substantial changes to existing monitoring and testing requirements, nor is it proposing the relaxation of existing license conditions.

Therefore, the facility's request to incorporate the applicable requirements of 06-096 C.M.R. ch. 101 is classified as a Part 70 Minor License Modification and has been processed under *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140.

# **II. APPLICABLE VISIBLE EMISSIONS STANDARDS AND REQUESTS FOR STREAMLINING**

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#### A. Boiler #1

1. 40 C.F.R. Part 60, Subpart Db

Boiler #1 is subject to the following visible emissions standard pursuant to 40 C.F.R. Part 60, Subpart Db:

Visible emissions from Boiler #1 shall not exceed 20% opacity on a six-minute block average basis, except for no more than one (1) six-minute block average in a one-hour period of not more than 27% opacity. This standard applies at all times except for periods of startup, shutdown, and malfunction. [40 C.F.R. §§ 60.43b(f) and (g)]

2. 06-096 C.M.R. ch. 101

Boiler #1 is subject to the following visible emissions standard pursuant to 06-096 C.M.R. ch. 101, § 4(A)(5)(b):

Visible emissions from Boiler #1 shall not exceed 20% opacity on a six-minute block average basis for 95% of all six-minute block averages on a quarterly basis. The remaining 5% of all six-minute block averages on a quarterly basis shall be no greater than 45% opacity. Periods of startup, shutdown, and malfunctions are included for the purpose of calculating block averages. Periods when the unit is not operating are not included for the purpose of calculating block averages.

3. 06-096 C.M.R. ch. 140, BPT

With this amendment, the Department is establishing the following new visible emissions standard through BPT:

Visible Emissions from Boiler#1 shall not exceed 20% opacity on a six-minute block average basis at all times the unit is operating, except for the following:

- a. For one (1) six-minute block per hour during normal operation (i.e., other than during periods of startup, shutdown, or malfunction), visible emissions may exceed 20% opacity but shall not exceed 27% opacity; and
- b. During periods of startup, shutdown, or malfunction, visible emissions shall not exceed 45% opacity for any six-minute block average.

In addition, the number of six-minute block averages greater than 20% opacity shall not exceed 5% of the total number of six-minute block averages for all times

Boiler #1 is operating during any calendar quarter, including periods of normal operation as well as periods of startup, shutdown, or malfunction.

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4. Streamlining

The Department has determined that the BPT visible emissions standard is more stringent than all other applicable standards. Therefore, the visible emissions limits have been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the Order of this air emission license. Streamlining the BPT limit with the Federally enforceable limits in 40 C.F.R. Part 60, Subpart Db and 06-096 C.M.R. ch. 101 makes the BPT limit Federally enforceable.

## **B.** Fuel Pile Fires

Air Emission License A-368-70-B-M (issued 7/3/2002) established a notification requirement for fuel pile fires whenever visible emissions from a fuel pile fire exceeds 20% opacity on a five-minute block average basis. This state-only condition references the visible emissions standard for fugitive emissions in 06-096 C.M.R. ch. 101. For clarity, the reference to 06-096 C.M.R. ch. 101 is being removed; however, the standard itself remains unchanged.

## C. Diesel Units 1 and 2

On January 1, 2024, the applicable visible emissions standard for Diesel Units 1 and 2 contained in 06-096 C.M.R. ch. 101 changed to the following:

Visible emissions from Diesel Units 1 and 2 shall each not exceed an opacity of 20% on a six-minute block average basis, except during periods of startup. During periods of startup, the engines must meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard. Use of the following work practice standards and alternative visible emissions standard in lieu of the normal operating visible emissions standard in lieu of the normal operating visible emissions standard is limited to no more than once per day per engine.

- a. The duration of the startup shall not exceed 30 minutes per event;
- b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
- c. RES shall keep records as of the date, time, and duration of each startup event. [06-096 C.M.R. ch. 101, § 4(A)(4)]

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

This new standard is considered more stringent than the applicable requirement in the previous version of 06-096 C.M.R. ch. 101, and only this more stringent standard shall be included in the Order of this air emission license.

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## **D.** Propane Unit 1

On January 1, 2024, the applicable visible emissions standard for Propane Unit 1 contained in 06-096 C.M.R. ch. 101 changed to the following:

Visible emissions from Propane Unit 1 shall not exceed 20% opacity on a six-minute block average basis.  $[06-096 \text{ C.M.R. ch. } 101, \S 4(A)(4)]$ 

This new standard is considered more stringent than the applicable requirement in the previous version of 06-096 C.M.R. ch. 101, and only this more stringent standard shall be included in the Order of this air emission license.

## E. Fugitive Emissions

On January 1, 2024, the applicable visible emissions standard for Fugitive Emissions contained in 06-096 C.M.R. ch. 101 changed to the following:

RES shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

RES shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22. [06-096 C.M.R. ch. 101, § 4(C)]

This new standard is considered more stringent than the applicable requirement in the previous version of 06-096 C.M.R. ch. 101, and only this more stringent standard shall be included in the Order of this air emission license.

## F. General Process Sources

On January 1, 2024, the applicable visible emissions standard for General Process Sources contained in 06-096 C.M.R. ch. 101 changed to the following:

Visible emissions from any general process source shall not exceed 20% on a sixminute block average basis.  $[06-096 \text{ C.M.R. ch. 101}, \S 4(B)(4)]$  ReEnergy Stratton LLC Franklin County Stratton, Maine A-368-70-O-A Departmental Findings of Fact and Order Part 70 Air Emission License Amendment #1

#### **G.** Facility Annual Emissions

This license amendment will not change the facility's licensed annual emissions.

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#### ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License Amendment A-368-70-O-A pursuant to 06-096 C.M.R. 140 and the preconstruction permitting requirements of *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 and subject to the conditions found in Air Emission License A-368-70-N-R and the following conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 140.

For each specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

<u>Severability</u>. The invalidity or unenforceability of any provision of this License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Amendment shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

## **SPECIFIC CONDITIONS**

## The following shall replace Condition (15)(D) of Air Emission License A-368-70-N-R:

- (15) **Boiler #1** 
  - D. RES shall notify the Department of any smoldering/smoking fuel piles or fuel pile fires by the next business day. The trigger for notification shall be visible emissions from a fuel pile in excess of 20% opacity on a five (5) minute block average basis. [06-096 C.M.R. ch. 140, BPT (A-368-70-B-M, 7/3/2002)] Enforceable by State-only

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## The following shall replace Condition (15)(H) of Air Emission License A-368-70-N-R:

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## (15) **Boiler #1**

H. Visible Emissions

Visible Emissions from Boiler#1 shall not exceed 20% opacity on a six-minute block average basis at all times the unit is operating, except for the following:

- 1. For one (1) six-minute block per hour during normal operation (i.e., other than during periods of startup, shutdown, or malfunction), visible emissions may exceed 20% opacity but shall not exceed 27% opacity; and
- 2. During periods of startup, shutdown, or malfunction, visible emissions shall not exceed 45% opacity for any six-minute block average.

In addition, the number of six-minute block averages greater than 20% opacity shall not exceed 5% of the total number of six-minute block averages for all times Boiler #1 is operating during any calendar quarter, including periods of normal operation as well as periods of startup, shutdown, or malfunction. [06-096 C.M.R. ch. 140, BPT]

## The following shall replace Condition (16)(C) of Air Emission License A-368-70-N-R:

## (16) Engines

- C. Visible Emissions
  - 1. Visible emissions from Diesel Units 1 and 2 shall each not exceed 20% opacity on a six-minute block average basis except for periods of startup, during which time RES shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.
    - a. The duration of the startup shall not exceed 30 minutes per event;
    - b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
    - c. RES shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day per engine.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

[06-096 C.M.R. ch. 101, § 4(A)(4)]

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2. Visible emissions from Propane Unit 1 shall not exceed 20% opacity on a sixminute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(4)]

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## The following are New Conditions:

#### (28) Fugitive Emissions

- RES shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.
- 2. RES shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

[06-096 C.M.R. ch. 101, § 4(C)]

## (29) General Process Sources

Visible emissions from any general process source shall not exceed 20% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

DONE AND DATED IN AUGUSTA, MAINE THIS  $9^{th}$  day of APRIL, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION BY: for MELANIE LOYZIM, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License

A-368-70-N-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application:12/11/2023Date of application acceptance:12/12/2023

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Muzzey, Bureau of Air Quality.

FILED

APR 09, 2024

State of Maine Board of Environmental Protection